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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/643,197

08/18/2003

William A. Bastian II

3436-13

3658

7590

06/06/2005

Woodard, Emhardt, Moriarty, McNett & Henry LLP  
Bank One Center/Tower  
Suite 3700  
111 Monument Circle  
Indianapolis, IN 46204-5137

EXAMINER

SHIMIZU, MATSUICHIRO

ART UNIT

PAPER NUMBER

2635

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/643,197

**Applicant(s)**

BASTIAN, WILLIAM A.

**Examiner**

Matsuichiro Shimizu

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-22 and 35 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9-14, 16, 17, 23-27 and 29-33 is/are rejected.
- 7) ☒ Claim(s) 4, 8, 15, 28 and 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/20/04; 11/4/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections – 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 5-6,9, 11-13,16-17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danelski (5,812,986) in view of Campo (5,910,653).

Regarding claim 1, Danelski teaches a method, comprising: providing a pick/put to display device (col. 1, lines 28-30, service associated with light directed module 28 (col. 5, lines 32-38)) with an image display and an indicator light; illuminating the indicator light to alert (col. 2, lines 35-44, alerting associated with light display) an operator of a service to be performed on an item at a storage location; displaying a service instruction (fig. 2, col. 2, lines 25-29, instruction associated with quantity of items to be serviced and inventory specialist will press a task complete button after completing the service) for the item. But Danelski does not teach an image of the item on the image display.

However, Campo teaches, in the art of display devices, an image of the item on the image display (col. 4, lines 23-34 and lines 61-65, shelf tag 10 includes graphical display 20 of grocery product or image of item) for the purpose of providing better recognition of item. Therefore, it would have been obvious to a person skilled in the

art at the time of invention was made to include an image of the item on the image display in the device of Danelski because Danelski suggests an image concerning the item and Campo teaches an image of the item on the image display for the purpose of providing better recognition of item.

Regarding claim 9, Campo teaches the method of claim 1, wherein said displaying the image of the item includes showing a three-dimensional image on the image display (col. 7, lines 18-23, rolling, scrolling or animation effects of items suggests three dimensional display).

Regarding claim 11, Danelski continues to teach the method of claim 1, wherein the image includes a static picture of the item (col. 4, lines 23-34 and lines 61-65, graphical display 20 of grocery product or image of item suggests static display).

Regarding claim 16, Danelski in view of Campo teaches the method of claim 1, further comprising: receiving (col. 7, lines 18-23, operation including rolling , scrolling or animation effects of items) operator input with the pick/put to display device (Danelski-col. 1, lines 28-30, pick/put items); and wherein said displaying on the image display the image of the item occurs in response to said receiving operator input (Campo-col. 7, lines 18-23, different display in response to operation including rolling , scrolling or animation effects of items).

Regarding claim 17, Danelski in view of Campo teaches the method of claim 1, further comprising wherein the pick/put to display device is operatively coupled to a server (Danelski - fig. 2, server 12) through a network (Danelski - network coupled to transceivers 14, 18); and receiving from the server a message concerning the item (Danelski - col. 2, lines 38-44, service associated with new item) ; and wherein said displaying on the image display the image (Campo - col. 4, lines 23-34 and lines 61-65,

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shelf tag 10 includes graphical display 20 of grocery product or image of item) of the item occurs in response to said receiving from the server the message.

Regarding claim 5, Danelski in view of Campo teaches the method of claim 1, wherein displaying the image of the item and after said illuminating the indicator light occurs. But Danelski in view of Campo does not teach said displaying the image of the item occurs after said illuminating the indicator light.

However, Danelski in view of Campo teaches displaying the image of the item and after said illuminating the indicator light occurs, and furthermore, one of ordinary skill in the art recognizes said displaying the image of the item occurs after said illuminating the indicator light provides same indicator as displaying the image of the item and said illuminating the indicator light occur. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include said displaying the image of the item occurs after said illuminating the indicator light as a matter of choice in design because Danelski in view of Campo suggests displaying the image of the item and said illuminating the indicator light occur and one skilled in the art recognizes said displaying the image of the item occurs after said illuminating the indicator light is a matter of choice in design through routine experimentation in order to achieve optimum illuminating operation.

Regarding claim 6, Campo continues to teach the method of claim 1, wherein said displaying the image of the item includes showing a moving image on the image display (col. 7, lines 18-23, rolling, scrolling or animation effects of items suggests movement of image display).

Regarding claim 12, Danelski continues to teach the method of claim 1, wherein the service instruction includes a pick instruction (col. 1, lines 24-32 and col. 2, lines 35-44, receiving the instruction by the light display to pick or put item in the bin is suggested by function of inventory specialist).

Regarding claim 13, Danelski continues to teach the method of claim 12, wherein the

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service instruction includes a quantity (col. 1, lines 24-32 and col. 2, lines 35-44, display of item quantity).

All subject matters in claim 23 are discussed above with regards to claim 1, and therefore rejection of the subject matters expressed in claim 23 are met by references and associated arguments applied to rejection of claim 1.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danelski in view of Campo as applied to claim 1 above, and further in view of Takizawa (JP 2000118641).

Regarding claim 2, Danelski in view of Campo is silent on displaying an arrow that points towards the storage location on the image display.

However, Takizawa teaches, in the art of display device, displaying an arrow that points towards the storage location on the image display (Figs. 2 and 4, arrow pointing to the storage location on the image display 8) for the purpose of increasing sorting reliability. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include displaying an arrow that points towards the storage location on the image display in the device of Danelski in view of Campo because Danelski in view of Campo suggests pick/put to display device and Takizawa teaches displaying an arrow that points towards the storage location on the image display for the purpose of increasing sorting reliability.

All subject matters except service instruction display and image display occur at the same time in claim 3 are discussed above with regards to claims 1-2. However, Danelski in view of Campo and Takizawa teaches service instruction display and image display. Furthermore, one of ordinary skill in the art recognizes service instruction and image display occur at the same time provides same function as service instruction display and image display. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include service instruction and image

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display occur at the same time as a matter of choice in design because Danelski in view of Campo and Takizawa suggests service instruction and image display and one skilled in the art recognizes service instruction and image display occur at the same time is a matter of choice in design through routine experimentation in order to achieve optimum operation. Therefore rejection of the subject matters expressed in claims 3 are met by references and associated arguments applied to rejection of claims 1-2 and to rejection provided in the previous paragraph.

Claims 7, 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danelski in view of Campo as applied to claim 6 above, and further in view of Johnsen (5,151,684).

Regarding claim 7, Danelski in view of Campo continues to teach the method of claim 6, further comprising: wherein the display device includes text. But Danelski in view of Campo does not teach the display device includes a speaker; and playing sound from the speaker.

However, Johnsen teaches, in the art of alerting system, the display device includes a speaker; and playing sound from the speaker (col. 5, lines 22-23, audible alarm via tampering with the tag device; col. 6, lines 64-66, emitting audible sound by alarm 48) for the purpose of preventing unauthorized removal of item. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include the display device includes a speaker; and playing sound from the speaker in the device of Danelski in view of Campo because Danelski in view of Campo suggests the display device includes text and Johnsen teaches the display device includes a speaker; and playing sound from the speaker for the purpose of preventing unauthorized removal of item.

Regarding claim 10, Danelski in view of Campo continues to teach the method of claim 1, wherein said illuminating is the indicator light. But Danelski in view of Campo does not teach the indicator light includes flashing the indicator light.

However, Johnsen teaches, in the art of alerting system, the indicator light includes flashing the indicator light (col. 4, lines 59–65, flashing light) for the purpose of providing alert signal. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include the indicator light includes flashing the indicator light in the device of Danelski in view of Campo because Danelski in view of Campo suggests said illuminating is the indicator light and Johnsen teaches the indicator light includes flashing the indicator light for the purpose of providing alert signal.

Regarding claim 14, Danelski in view of Campo continues to teach the method of claim 1, further comprising wherein the pick/put to display device is operatively coupled to a server through a network (Danelski–Fig. 2, server 12; Campo–Fig. 1b, network server 80 and other devices 82); and display image of item (Campo–col. 7, lines 18–23, rolling, scrolling or animation effects of items suggests image display). But Danelski in view of Campo does not teach downloading onto the pick/put to display device a file from server.

However, Johnsen teaches, in the art of alerting system, downloading onto the pick/put to display device a file from server (col. 8, lines 13–55, downloading programs from sever associated with computer) for the purpose of providing device activation. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include downloading onto the pick/put to display device a file from server in the device of Danelski in view of Campo because Danelski



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in view of Campo suggests the display device includes text and Johnsen teaches downloading onto the pick/put to display device a file from server for the purpose of providing device activation.

Claims 24–27, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danelski in view of Johnsen (5.151,684).

Regarding claim 24, Danelski teaches a system, comprising: a pick/put to display device (col. 1, lines 28–30, service associated with light directed module 28 (col. 5, lines 32–38)) positioned proximal a storage location (col. 5, lines 1–15, a light based module 27 by the bin), the pick/put to display device including a processor for an instruction and an image that concern an item associated with the storage location (fig. 2, col. 4, lines 45–52, instruction to pick quantity of items to be serviced 32), memory operatively coupled to the processor, an indicator light operatively coupled to the processor to alert (col. 2, lines 35–44, alerting associated with light display for another pick–from item) an operator of a servicing task for the item at the storage location, and an image display operatively coupled to the processor to display the instruction and the image (fig. 2, col. 4, lines 45–52, instruction to pick quantity of items to be serviced 32) concerning the item at the storage location. But Danelski does not teach a processor operable to download a file.

However, Johnsen teaches, analogous display device, a downloading onto the pick/put to display device a file from server (col. 8, lines 13–55, downloading programs from server associated with computer) for the purpose of providing device activation. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include downloading onto the pick/put to display device a file from server in the device of Danelski because Danelski suggests the display device includes text and Johnsen teaches downloading onto the pick/put to display device a file from server for the purpose of providing device activation.

Regarding claim 27, Danelski teaches the system of claim 24, wherein the memory (col. 5, lines 5–7, memory associated with module address and quantity for display as an image) is configured to store the image.

Regarding claim 25, Danelski teaches the system of claim 24, further comprising: a server (fig. 2, server 12 or computer) operatively coupled to the processor, said server (fig. 2, server 12 or computer) being configured to store the image and being operable to send the image to the pick/put to display device (col. 1, lines 28–30, service associated with light directed module 28 (col. 5, lines 32–38)).

Regarding claim 26, Danelski teaches the system of claim 25, further comprising: a network operatively coupling the server (fig. 2, server 12 or computer) to the processor, said network including a wireless network (fig. 2, wireless network including server 12, transceivers 18 and 14).

Regarding claim 29, Danelski teaches the system of claim 24, further comprising: an input device operatively coupled to the processor to receive input from the operator (col. 4, lines 52–54, a task complete button 30 is depressed).

Regarding claim 31, Danelski teaches the system of claim 29, wherein the input device includes one or more buttons (col. 4, lines 52–54, buttons 30 associated with plural bins).

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Danelski in view of Johnsen as applied to claim 24 above, and further in view of Huang et al. (5,827,753).

Regarding claim 32, Danelski teaches the system of claim 24, wherein said image display. But Danelski in view of Johnsen does not teach display includes an organic light emitting diode display.

However, Huang teaches, in the art of display system, display includes an organic light emitting diode display (col. 1, lines 35–49, organic LED) for the purpose of providing a very wide viewing angle. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include display includes an organic light emitting diode display in the device of Danelski in view of Johnsen because Danelski in view of Johnsen suggests the display device and Huang teaches display includes an organic light emitting diode display for the purpose of providing a very wide viewing angle.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Danelski in view of Johnsen as applied to claim 24 above, and further in view of Takizawa.

Regarding claims 33, Danelski in view of Johnsen is silent on said image display is configured to display a location arrow that points to the storage location.

However, Takizawa teaches, in the art of display device, said image display is configured to display a location arrow that points to the storage location (Figs. 2 and 4, arrow pointing to the storage location on the image display 8) for the purpose of increasing sorting reliability. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include said image display is configured to display a location arrow that points to the storage location in the device of Danelski in view of Johnsen because Danelski in view of Johnsen suggests the display device and Takizawa teaches said image display is configured to display a location arrow that points to the storage location for the purpose of increasing sorting reliability.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Danelski in view of Johnsen as applied to claim 29 above, and further in view of Astrin et al. (6,639,990).

Regarding claim 30, Danelski teaches the system of claim 29, wherein the input device includes a microphone. But Danelski in view of Johnsen does not teach input device includes a microphone.

However, Astrin teaches, in the art of input interface system, input device includes a microphone (col. 4, lines 26–48, microphone 48) for the purpose of providing two-way link to operator. Therefore, it would have been obvious to a person skilled in the art at the time of invention was made to include input device includes a microphone in the device of Danelski in view of Johnsen because Danelski in view of Johnsen suggests the display device and Astrin teaches input device includes a microphone for the purpose of providing two-way link to operator.

***Allowable Subject Matter***

Regarding claim 35, the prior arts fail to teach or fairly suggest a pick/put to display device positioned between the first storage location and the second storage location to handle service instructions for both the first storage location and the second storage location, the pick/put to display device having an image display configured to display a first arrow that points toward the first storage location and a second arrow that points to the second storage location.

Regarding claims 18–22, the prior arts fail to teach or fairly suggest positioning a pick/put to display device with an image display between a first storage location and a second storage location; displaying on the image display a first screen that includes a first arrow pointing toward the first storage location and a first instruction for servicing the first storage location; and displaying on the image display a second screen that includes a second arrow pointing toward the second storage location and a second instruction for servicing the second storage location.

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Claims 4 and 8, 15, 28, 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the prior arts fail to teach or fairly suggest displaying a second arrow on the image display that points towards a second storage location for a second item; and displaying an image of the second item at the second storage location on the image display.

Regarding claims 8, the prior arts fail to teach or fairly suggest said playing sound occurs during said showing the moving image.

Regarding claims 15, the prior arts fail to teach or fairly suggest playing the sound file on a speaker of the pick/put to display device.

Regarding claims 28, the prior arts fail to teach or fairly suggest said processor is operable to download on or more sounds concerning the item and play the sounds on the speaker.

Regarding claims 34, the prior arts fail to teach or fairly suggest said image display is configured to display a cell indicator that identifies an individual cell within the storage location.

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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matsuichiro Shimizu whose telephone number is 571-272-3066. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3068.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-8576).

Matsuichiro Shimizu

May 14, 2005



MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

